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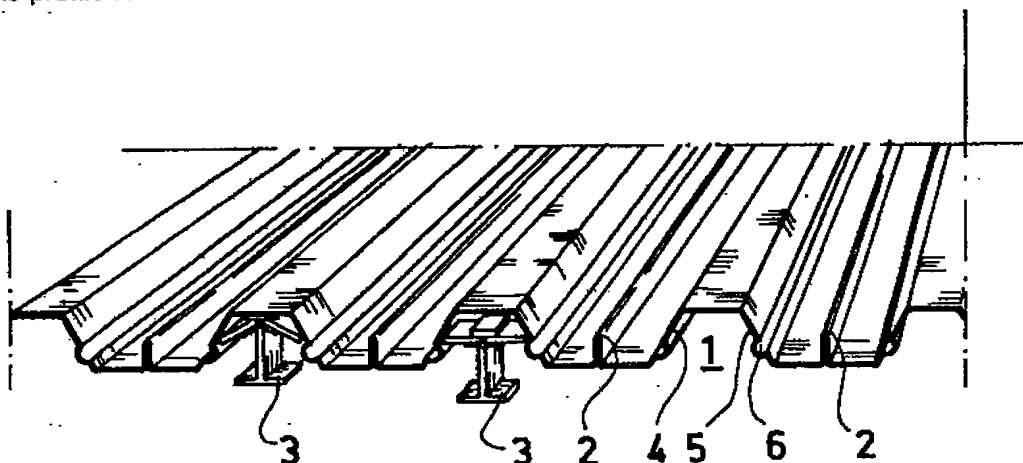
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GB 1454957 GB 0819668 EP A1 0003506
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(58) Field of search
E1D
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(54) Trapezoidally corrugated metal sheet

(57) A compound slab section for false floors of concrete, made of sheet metal and presenting mutually parallel profile recesses (1) with substantially trapezoidal cross section which are directed upward from its plane. Characterised in that in both walls (4,5) of the profile recess, deviating from the horizontal plane, have been formed one or several grooves (6) longitudinal to the profile recess and extending over the length of the profile recess.

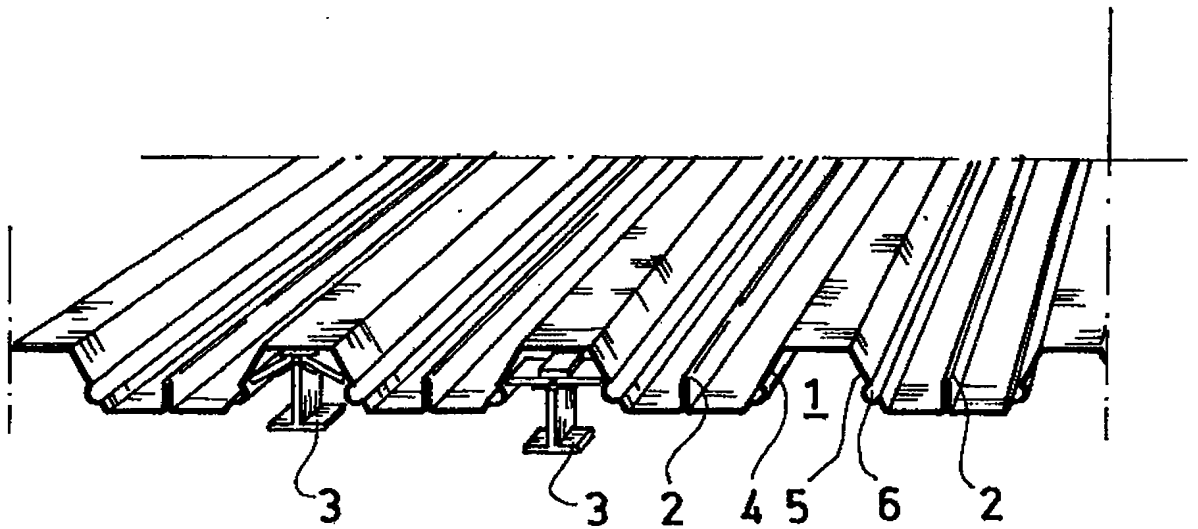


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SPECIFICATION

Compound slab selection

5 The present invention concerns a compound slab section for false floors of concrete, said section being made of sheet metal and presenting mutually parallel profile recesses of substantially trapezoidal cross section which
10 are upwardly directed from its plane.

A compound slab section of similar kind has been disclosed in the Finnish Patent No. 57295. The compound slab section is employed when pouring concrete floors, in re-
15 placement of boarding. As the concrete hardens, the section becomes anchored thereon and it remains permanently in place. One of the advantages, compared with boarding, is that the underside propping required during
20 the concreting job is less space-consuming, whereby free working space is left under the slab. The section on the underside of the completed slab takes up tensile stresses, and the thickness of the slab may therefore be
25 reduced.

When constructing a false floor, one places the compound slab sections side by side on rather sparsely positioned supporting beams, these beams in turn being propped against a
30 base. The sections are tied together either with rivets or by spot welding. After the compound slab sections have been laid down, any installation work is carried out that may be required, such as laying electric conduits and
35 sealing the margins of passages provided through the floor in order to prevent the concrete mix from running out through them.

The object of the present invention is to improve even further a compound slab section of this type by facilitating, among other things, the insertion of electric conduits, which was already mentioned. The compound slab
40 section of the invention is characterized in that in both walls of the profile recess, differing
45 from the horizontal plane, have been provided one or several grooves longitudinal to the profile recess and extending over the length of the profile recess.

An advantageous embodiment of the invention is characterized in that the groove constitutes in the wall of the profile recess a projection extending into the profile recess.
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Another advantageous embodiment of the invention is characterized in that in each of the
55 two walls of the profile recess, deviating from the horizontal plane, has been formed one groove and that these grooves are mutually substantially similar and located on the same height.

60 Numerous advantages are gained with the aid of the invention. The grooves lend added rigidity to the section at the mould stage. It is easy to attach to them pipelines, advertising structures, and even shelves. The grooves
65 also serve as water channels in the event of

fire.

In the following, the invention is described in detail with reference to the attached drawing, wherein the figure presents, in perspective
70 and viewed from one end, a compound slab section according to the invention.

The compound slab section has trapezoidally shaped profile recesses 1, all of them extending upwards from the plane of the section and running parallel with each other. In the intervals of the profile recesses there are folds 2
75 produced of the same metal sheet, running parallel to them and pointing upwards from the plane of the compound slab section. The top edge of the folds may be provided with downward embossed recesses (not shown in the figure), which serve as adhesion dents co-
80 operating with the concrete.

In the walls 4,5 of the profile recesses 1
85 have been formed grooves 6 of substantially semicircular shape, which extend to within the profile recesses, constituting projections. The grooves are open in the direction outward from the profile recess 1. In each wall 4,5 has
90 been formed, close to its lower margin, one groove, both grooves on the same height so that they may be used towards suspending various kinds of supports. In the figure is shown one support 3 which has been sus-
95 pended so as to be supported by the projections/grooves 6. In the figure, the support on the left has been depicted in the stage in which it has just been pushed into the profile recess 1 and the support on the right, in that
100 stage in which it has been pulled downwards so that it has become locked and is firmly held behind the projections 6. It is possible with the aid of such supports to suspend many kinds of imaginable accessories, e.g.
105 pipes, shelves, advertising structures, etc.

It is obvious to a person skilled in the art that the invention is not confined to the embodiment examples considered in the foregoing and that it may be varied within the scope
110 of the claims following below.

CLAIMS

1. Compound slab section for false floors of concrete, made of sheet metal and presenting mutually parallel profile recesses (1) with substantially trapezoidal cross section which are directed upward from its plane, characterized in that in both walls (4,5) of the profile recess, deviating from the horizontal plane,
115 have been formed one or several grooves (6) longitudinal to the profile recess and extending over the length of the profile recess.

2. Compound slab section according to claim 1, characterized in that the groove (6) constitutes in the wall (4,5) of the profile recess (1) a projection extending to within the profile recess.
125

3. Compound slab section according to claim 1 or 2, characterized in that in each of
130 the two walls (4,5) of the profile recess (1),

deviating from the horizontal plane, has been formed one groove (6) and that these grooves are mutually substantially similar and are located on the same height.

5 4. Compound slab section according to any one of claims 1-3, characterized in that the grooves (6) are substantially semicircular.

10 5. Compound slab section as claimed in Claim 1, substantially as described herein with reference to the accompanying drawing.

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